



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,123	11/13/2001	Louis B. Rosenberg	IMM030B	1417

7590

09/12/2002

James R. Riegel
IMMERSION CORPORATION
801 Fox Lane
San Jose, CA 95131

EXAMINER

BELL, PAUL A

ART UNIT

PAPER NUMBER

2675

DATE MAILED: 09/12/2002

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/992,123

Applicant(s)

ROSENBERG ET AL.

Examiner

PAUL A BELL

Art Unit

2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 13 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 44-66 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 44,47,48,50-58 and 60-66 is/are rejected.
- 7) ☐ Claim(s) 45, 46, 49, and 59 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2675

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

2. Claims 44, 47, 48-58, and 60-66 are rejected under 35 U.S.C. 102(e) as being anticipated by Barber et al. (5,973,670).

With regard to claim 44 Barber et al. teaches a method for interfacing an interface device (figure 3) with a host computer (figure 1, item 16) to select a function in a graphical user interface (figure 1, item 32) implemented on said host computer, the host computer in communication (figure 1, item 28) with the interface device, the method comprising: causing an update of a display of a cursor (figure 1, item 34) within said graphical user interface using sensor information received from said interface device (column 1, lines 19-27), said sensor information representing motion of at least a portion of said interface device; enabling a determination of whether said cursor engages a graphical target displayed within said graphical user interface; enabling a determination of a speed of said engagement of said cursor with said graphical target; and causing a tactile feedback command to be provided (column 1, lines 61-67), based upon said speed of said engagement (column 2, lines 1-9), to said interface device to cause

Art Unit: 2675

a tactile sensation to be output to a user when said cursor engages said graphical target (column 6, lines 25-40 it is inherent to how a button works that there is a trigger location).

With regard to claim 47 Barber et al. teaches determining when said cursor has moved to or past a trigger location positioned in said graphical target (figure 4, item 58).

With regard to claim 48 Barber et al. teaches selecting a function within said graphical user interface when said cursor has moved to or past said trigger location (figure 4).

With regard to claim 50 Barber et al. teaches wherein said graphical target is a menu element displayed in said graphical environment (it is inherent that a common menu is a graphical target).

With regard to claim 51 Barber et al teaches wherein said graphical target is a graphical button (column 5, lines 54-60).

With regard to claim 52 Barber et al. teaches further comprising changing at least one displayed characteristic of said graphical target to indicate that said function has been selected (column 1, lines 40- 45).

With regard to claim 53 Barber et al teaches wherein said at least a portion of said interface device comprises a user object (figure 1).

With regard to claim 54 Barber et al. teaches wherein said tactile sensation output to said user includes a force on said user object (column 1, lines 60-67).

With regard to claim 55 barber et al. teaches wherein the tactile sensation output to said user comprises one or more of a vibration, a texture, and a jolt (column 4, lines 50-61).

Art Unit: 2675

With regard to claim 56, Barber et al. teaches a method for interfacing an interface device (figure 3) with a host computer (figure 1, item 16) to select a function in a graphical user interface (figure 1, item 32) implemented on said host computer, the host computer in communication with the interface device (figure 1, item 28), the method comprising: causing an update of a display of a cursor (figure 1, item 34) within said graphical user interface using sensor information received from said interface device, said sensor information representing motion of at least a portion of said interface device (column 1, lines 19-27); enabling a determination of whether said cursor engages a graphical target displayed within said graphical user interface; causing a tactile feedback command to be provided to said interface device to cause a tactile sensation to be output to a user when said cursor engages said graphical target; enabling a determination of whether said cursor has moved to or past a trigger location positioned in said graphical target; when said cursor has moved to or past said trigger location, enabling said selecting of said function within said graphical user interface; and causing said tactile sensation to change indicate to said user that said function has been selected (column 6, lines 25-40 it is inherent to how a button works that there is a trigger location).

With regard to claim 57 Barber et al. teaches wherein said cursor is determined to have moved to said trigger position when said cursor has moved a distance past a point of engagement corresponding to a predetermined distance (figure 4 these feature are inherent to how a button works).

Art Unit: 2675

With regard to claim 58 Barber et al. teaches wherein said graphical target is modified visually when said cursor reaches said trigger position (column 1 lines 36- 50).

With regard to claim 60 Barber et al. teaches wherein said graphical target is a menu element displayed in said graphical environment (it is inherent that a common menu is a graphical target).

With regard to claim 61 Barber et al. wherein said graphical target is a graphical button displayed in a web page graphical environment (it is inherent that a common graphical button in a web page is a graphical target).

With regard to claim 62 Barber et al. teaches further comprising changing at least one displayed characteristic of said graphical target after said trigger location has been exceeded to indicate to said user that said function has been selected (column 1, lines 40-60).

With regard to claim 63 Barber et al. teaches wherein said at least a portion of said interface device comprises a user object (figure 3).

With regard to claim 64 Barber et al. teaches wherein said tactile sensation output to said user comprises a force on said user object (column 1, lines 61-67).

With regard to claim 65 Barber et al. teaches wherein the tactile sensation output to said user comprises one or more of a vibration, a texture, and a jolt (column 4, lines 50-61).

With regard to claim 66, Barber et al. teaches a computer readable medium (figure 1, item 20) including program instructions (figure 1, items 18 and 12) for interfacing an interface device (figure 3) with a host computer (figure 1, item 16) and causing a function in a graphical user

Art Unit: 2675

interface (figure 1, item 30) implemented on said host computer to be selected , the host computer in communication with the interface device (figure 1 item 28), the program instructions performing steps comprising: causing an update of a display of a cursor (figure 1, item 34) within said graphical user interface using sensor information received from said interface device (column 1, lines 19-27), said sensor information representing motion of at least a portion of said interface device; enabling a determination of whether said cursor engages a graphical target displayed within said graphical user interface; causing a tactile feedback command to be provided to said interface device to cause a tactile sensation to be output to a user when said cursor engages said graphical target (column 1, lines 61-67); enabling a determination of whether said cursor has moved to or past a trigger location positioned in said graphical target; when said cursor has moved to or past said trigger location, enabling said selecting of said function within said graphical user interface; and causing said tactile sensation to change indicate to said user that said function has been selected (column 6, lines 25-40 it is inherent to how a button works that there is a trigger location).

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

Art Unit: 2675

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 56 and 66 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 14 of U.S. Patent No. 6,317,116.

Although the conflicting claims are not identical, they are not patentably distinct from each other because although the conflicting claims are not identical, they are not patentably distinct from each other because the differences are an obvious variation of the actual patent claim in view of the parts of the patent disclosure that support the claim language and give the claim meaning in combination with an obvious form of analysis with regard to any non-distinctive differences.

With regard to application claim 56;

A method for interfacing **an interface device** with a **host computer** to select a **function** in a **graphical user interface** implemented on said host computer, the host computer in communication with the interface device, the method comprising: causing an update of a display of a **cursor** within said graphical user interface using **sensor information** received from said interface device, said sensor information representing motion of at least a portion of said interface device; enabling a determination of whether said cursor **engages a graphical target** displayed within said graphical user interface; causing a **tactile feedback command** to be provided to said interface device to cause a **tactile sensation to be output to a user** when said cursor engages said graphical target; enabling a determination of whether said cursor has moved to or past a **trigger location** positioned in said graphical target; when said cursor has moved to or past said trigger location, enabling said selecting of said function within said graphical user interface; and causing said **tactile sensation to change indicate to said user that said function has been selected.**

Art Unit: 2675

With patent claim 14;

A method of using a **force feedback interface device** to select a **function** in a **graphical user interface** implemented on a **host computer**, the host computer in communication with the force feedback interface device, the method comprising: updating a location of a **cursor** within said graphical user interface using **sensor information** received from said force feedback interface device, said sensor information representing motion of at least a portion of said force feedback interface device; determining when said cursor **engages a click surface** of a **graphical element** displayed within said graphical user interface; providing a **force command** to said force feedback interface device to cause **a force to be output to a user** when said cursor engages said click surface; maintaining a display of said click surface of said graphical element at a point where said cursor first engaged said click surface while said at least a portion of said force feedback interface device is moved into said click surface; determining when said cursor has moved to or past a **trigger location** positioned into said click surface; when said cursor has moved to or past said trigger location, selecting said function within said graphical user interface; and **changing said force to indicate to said user that said function has been selected.**

It is apparent that the above highlighted limitations of patent claim 14 and application claim 56 are obvious variations of each other and claim 56 is simply viewed as more narrow.

Also with regard to application claim 66;

A **computer readable medium** including **program instructions** for interfacing an **interface device** with a **host computer** and causing a **function** in a **graphical user interface** implemented on said host computer to be selected, the host computer in communication with the interface device, the program instructions performing steps comprising: causing an update of a display of a **cursor** within said graphical user interface using **sensor information** received from said interface device, said sensor information representing motion of at least a portion of said interface device; enabling a determination of whether said cursor **engages a graphical target** displayed within said graphical user interface; causing a **tactile feedback command** to be provided to said interface device to cause **a tactile sensation to be output to a user** when said cursor engages said graphical target; enabling a determination of whether said cursor has moved to or past a **trigger location** positioned in said graphical target; when said cursor has moved to or past said trigger location, enabling said selecting of said function within said graphical user

Art Unit: 2675

interface; and causing said **tactile sensation to change indicate to said user that said function has been selected.**

It is apparent that the above highlighted limitations of patent claim 14 and application claim 66 are obvious variations of each other and claim 66 is simply viewed as more narrow and in addition applicant is now claiming "program instructions" on "a computer readable medium" causing the claimed steps, these added limitations are viewed as inherent features of a "host computer".

Allowable Subject Matter

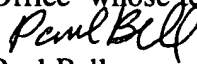
5. Claims 45, 46, 49 and 59 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Bell whose telephone number is (703) 306-3019. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Saras, can be reached at (703) 305-9720.

Any response to this action should be mailed to: Commissioner of Patents and Trademarks
Washington, D.C. 20231
or faxed to: (703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.


Paul Bell
Art unit 2675
6 September 2002


PAUL BELL
EXAMINER